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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,424	07/16/2003	Rudiger Kurtz	P23754	7328

7055 7590 07/27/2006

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EXAMINER

LAMB, BRENDA A

ART UNIT PAPER NUMBER

1734

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/619,424

Applicant(s)

KURTZ ET AL.

Examiner

Brenda A. Lamb

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-15 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/98585.

WO '585 as shown in figure 2 teaches a device for impregnating a web with an impregnating agent comprising the following elements: a coating device structured and arranged to apply the impregnating agent to the web; and a wide nip calendar located, with respect to a web travel direction, before the coating device, the wide nip calendar comprising a circulating jacket and a back pressure element (an soft elastic belt passing over a stationary shoe) arranged to form a wide nip calendar (see page 7 lines 11-18). WO '585 teaches at page 8 line 32 to page 9 line 5 the fibers are deformed by precalendering and therefore the web compression as a result of the taught deformation

of the fibers is still present when the web enters the coating device. WO '585 teaches at page 7 lines 31-32 and the shoe is adjustable to change the pressure profile and nip length. WO '585 fails to teach the wide nip calender provides for elastic compression of the web. However, it would have been obvious that the WO '585 wide nip calender in the WO '585 device for impregnating a web with an impregnating agent is capable of elastic compression dependent on the pressure profile and nip length of the wide nip calender which is adjustable via the shoes in the wide nip calender as taught by WO '585 and such compression is capable of being present when the web enters the coating device dependent on amount of resiliency of the web and degree of compression of the web. With respect to claim 2, WO '585 apparatus is capable of applying an impregnating agent which is comprised of a starch solution or other coating agents commonly used in paper upgrading since WO 585 teaches every structural element of the claimed apparatus. With respect to claim 3, WO 585 apparatus is capable of applying an impregnating agent which is comprised of a starch size WO '585 teaches every structural element to the claimed apparatus. With respect to claim 4, WO '585 apparatus is capable of applying an impregnating agent to a web which is comprised of one of a paper or cardboard web since WO '585 teaches every structural element of the claimed apparatus. With respect to claim 5, WO '585 apparatus is capable of applying an impregnating agent to a web wherein the web has a basis weight over 40g/m since WO '585 teaches every structural element of the claimed apparatus. With respect to claim 6-7, WO '585 is silent as to web processing devices provided between the wide nip calender and the coating device thereby reading on the negatively

claimed limitation that no web processing devices are provided between the wide nip calender and the coating device. Further, WO '585 shows in Figure 1 at least one guide device is arranged between the wide nip and the coating device. With respect to claim 8-10, WO '585 teaches the wide nip calender is comprised of a heating device, roll 1, which is a back pressure element having a surface structured and arranged to guide the web through the wide nip, and the surface having a temperature adjustable to within the scope of the claim. With respect to claim 11, WO '585 teaches the coater is a film press. With respect to claim 14, WO '585 teaches the wide nip calender is adjustably heated to at least the plasticizing temperature of the fibers of the web (see page 8 lines 1-7 of WO '585). With respect to claims 12 and 15, WO '585 teaches at page 9 lines 7-8 a drying area which broadly reads on an area whereby the web is dried which is arranged after the coating device and a reeling device wherein the drying area and a reeling device are each arranged downstream of the coating device. Further, WO '585 fails to teach a glazing device arranged between the coating device and the reeling device thereby reading on the negative limitation of no glazing device arranged between the coating device and the reeling device. With respect to claim 13, WO '585 wide nip calender is capable of being heated to a temperature higher than the drying area or area whereby the web is dried since WO '585 teaches the wide nip calender includes a heating means for heating the wide nip calender. With respect to claim 33, as discussed above, WO '585, as shown in figure 2, teaches a device for impregnating the web with an impregnating agent comprising the following elements: a coating device structured and arranged to apply the impregnating agent to the web; and a wide nip

calendar located, with respect to a web travel direction, before the coating device, the wide nip calendar comprising a circulating jacket and a back pressure element, a belt passing over a stationary shoe, arranged to form a wide nip calendar (see page 7 lines 11-18). Further, WO '585 coater reads on a film press since WO '585 teaches a film or layer of coating is applied onto the web as the web travels through a nip N' of the rollers. WO '585 fails to teach the wide nip calendar provides for elastic compression of the web. However, it would have been obvious that the WO '585 wide nip calendar in the WO '585 device for impregnating a web with an impregnating agent is capable of elastic compression dependent on the pressure profile and nip length of the wide nip calendar which is adjustable via the shoes in the wide nip calendar as taught by WO '585.

Applicant's arguments filed 4/17/2006 have been fully considered but they are not persuasive.

Applicant's argument that WO '585 fails to teach his apparatus is capable of elastic compression of the web rather teaches permanent compression of the web is found to be non-persuasive. WO '585 teaches at page 4 line 23 to page 5 line 7 operating his apparatus such that fibers at the surface of the web are brought to a state in which plastic deformation of the fibers is permanent in the calendaring nip while fibers in the middle in the z-direction may be left unaffected wherein the bulkiness of the paper is maintained which would infer to one skilled in the art that WO '585 apparatus is capable of being operated such that elastic compression of the web in the calendaring nip occurs since fibers in the middle in the z-direction of the paper web are left

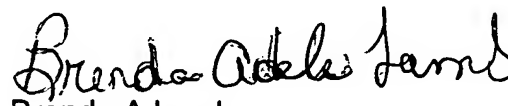
unaffected or not compressed and fibers only at the surface of the web are deformed thereby limiting compression of the web.

Applicant's argument that WO '585 fails to disclose the distance between the precalender and coater is such that elastic compression of the web is still present when the web enters the coating device is found to be non-persuasive. First of all, it is noted by the examiner that claim 33 is silent as to the claimed limitation that wherein a distance between the coating device and the wide nip calender is such that web elastic compression of the web by the wide nip calender is still present when the web enters the coating device rather only requires that the wide nip calender be capable of elastic compression of the web. However, it would have been obvious that the WO '585 wide nip calender in the WO '585 device for impregnating a web with an impregnating agent is capable of elastic compression dependent on the pressure profile and nip length of the wide nip calender which is adjustable via the shoes in the wide nip calender as taught by WO '585 and such compression is capable of being present when the web enters the coating device dependent on amount of resiliency of the web and degree of compression of the web and especially in view of WO '585 teaching as discussed above the precalender may be operated such fibers in the middle in the z-direction of the paper web are left unaffected or not compressed and fibers only at the surface of the web are deformed thereby limiting compression of the web but maintaining bulk of the paper web.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Lamb whose telephone number is (571) 272-1231. The examiner can normally be reached on Monday-Tuesday and Thursday-Friday with alternate Wednesdays off. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Brenda A Lamb
Examiner
Art Unit 1734